

§ 94.507

40 CFR Ch. I (7–1–04 Edition)

under § 94.9), the manufacturer shall use the test procedures used in certification for production line testing.

(b)(1) The manufacturer may not adjust, repair, prepare, modify, or perform any emission test on any test engine unless this adjustment, repair, preparation, modification and/or test is documented in the manufacturer's engine assembly and inspection procedures and is actually performed by the manufacturer or unless this adjustment, repair, preparation, modification and/or test is required or permitted under this subpart or is approved in advance by the Administrator.

(2) Any adjustable engine parameter must be set to values or positions that are within the range specified in the approved application for certification.

(3) The Administrator may adjust or require to be adjusted any engine parameter which the Administrator has determined to be subject to adjustment for certification and production line testing, to any setting within the specified adjustable range of that parameter, as determined by the Administrator, prior to the performance of any test.

(c) Service Accumulation/Green Engine Factor. The manufacturer shall accumulate up to 300 hours of service on the engines to be tested. In lieu of conducting such service accumulation, the manufacturer may establish a Green Engine Factor for each regulated pollutant for each engine family to be used in calculating emissions test results. The manufacturer shall obtain the approval of the Administrator prior to using a Green Engine Factor.

(d) The manufacturer may not perform any maintenance on test engines after selection for testing.

(e) If an engine is shipped to a facility other than the production facility for production line testing, and an adjustment or repair is necessary because of such shipment, the engine manufacturer must perform the necessary adjustment or repair only after the initial test of the engine, except where the Administrator has determined that the test would be impossible to perform or would permanently damage the engine.

(f) If an engine cannot complete the service accumulation or an emission

test, because of a malfunction, the manufacturer may request that the Administrator authorize either the repair of that engine or its deletion from the test sequence.

(g) *Retesting.* If an engine manufacturer determines that any production line emission test of an engine is invalid, the engine must be retested in accordance with the requirements of this subpart. Emission results from all tests must be reported to EPA, including test results the manufacturer determines are invalid. The engine manufacturer must also include a detailed explanation of the reasons for invalidating any test in the quarterly report required in § 94.508(e). In the event a retest is performed, a request may be made to the Administrator, within ten days of the end of the production quarter, for permission to substitute the after-repair test results for the original test results. The Administrator will either affirm or deny the request by the engine manufacturer within ten working days from receipt of the request.

§ 94.507 Sequence of testing.

(a) If one or more Category 1 or Category 2 engines fail a production line test, then the manufacturer must test two additional engines for each engine that fails.

(b) The two additional engines tested under paragraph (a) of this section shall be selected from either the next fifteen produced in that engine family, or from those engines produced in that engine family within 48 hours of the completion of the failed test.

[64 FR 73331, Dec. 29, 1999, as amended at 68 FR 9787, Feb. 28, 2003]

§ 94.508 Calculation and reporting of test results.

(a) Manufacturers shall calculate initial test results using the applicable test procedure specified in § 94.506(a). These results must also include the Green Engine Factor, if applicable. Round these results to the number of decimal places contained in the applicable emission standard expressed to one additional significant figure.

(b) To calculate test results, sum the initial test results derived in paragraph (a) of this section for each test engine,

divide by the number of tests conducted on the engine, and round to the same number of decimal places contained in the applicable standard expressed to one additional decimal place. (For example, if the applicable standard is 7.8, then round the test results to two places to the right of the decimal.)

(c) To calculate the final test results for each test engine, apply the appropriate deterioration factors, derived in the certification process for the engine family, to the test results described in paragraph (b) of this section; round to the same number of decimal places contained in the applicable standard expressed to one additional decimal place. (For example, if the applicable standard is 7.8, then round the test results to two places to the right of the decimal.)

(d) (1) If, subsequent to an initial failure of a Category 1 or Category 2 production line test, the average of the test results for the failed engine and the two additional engines tested, is greater than any applicable emission standard or FEL, the engine family is deemed to be in non-compliance with applicable emission standards, and the manufacturer must notify the Administrator within 2 working days of such noncompliance.

(2) [Reserved]

(e) Within 30 calendar days of the end of each quarter in which production line testing occurs, each manufacturer must submit to the Administrator a report which includes the following information:

(1) The location and description of the manufacturer's emission test facilities which were utilized to conduct testing reported pursuant to this section;

(2) Total production and sample size for each engine family;

(3) The applicable standards and/or FELs against which each engine family was tested;

(4) A description of the test engines;

(5) For each test conducted:

(i) A description of the test engine, including:

(A) Configuration and engine family identification;

(B) Year, make, and build date;

(C) Engine identification number;

(D) Number of hours of service accumulated on engine prior to testing; and

(E) Description of Green Engine Factor; how it is determined and how it is applied;

(ii) Location(s) where service accumulation was conducted and description of accumulation procedure and schedule, if applicable;

(iii) Test number, date, test procedure used, initial test results before and after rounding, and final test results for all production line emission tests conducted, whether valid or invalid, and the reason for invalidation of any test results, if applicable;

(iv) A complete description of any adjustment, modification, repair, preparation, maintenance, and testing which was performed on the test engine, has not been reported pursuant to any other paragraph of this subpart, and will not be performed on other production engines;

(v) Any other information the Administrator may request relevant to the determination whether the new engines being manufactured by the manufacturer do in fact conform with the regulations with respect to which the certificate of conformity was issued;

(6) For each failed engine as defined in § 94.510(a), a description of the remedy and test results for all retests as required by § 94.512(g);

(7) The date of the end of the engine manufacturer's model year production for each engine family tested; and

(8) The following signed statement and endorsement by an authorized representative of the manufacturer:

This report is submitted pursuant to Sections 213 and 208 of the Clean Air Act. This production line testing program was conducted in complete conformance with all applicable regulations under 40 CFR part 94. No emission-related changes to production processes or quality control procedures for the engine family tested have been made during this production line testing program that affect engines from the production line. All data and information reported herein is, to the best of (Company Name) knowledge, true and accurate. I am aware of the penalties associated with violations of the Clean Air Act and the regulations thereunder.
(Authorized Company Representative.)

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